

REMARKS

Applicants appreciate the consideration of the present application afforded by the Examiner. Claims 1, 4-7, 9, 25, 26, 28-38, and 40-47 were pending prior to the Office Action. Claims 6 and 45 have been canceled and claims 48-52 have been added through this Reply. Claims 1, 5, and 32 are independent. Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks.

35 U.S.C. § 112, 1st Paragraph Rejection

Claims 1, 4-7, 9, 25, 26, 28-38, and 40-47 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Applicants note that claim 45 has been canceled through this amendment, rendering the rejection of claim 45 moot.

In the Office Action, pages 2-4, the Examiner contends that the disclosure, as filed, does not fairly convey to one of ordinary skill in the art that Applicants had in their possession the claimed features regarding “sending a mouse button event modified by a selected keyboard function”.

More specifically, the Examiner appears to be arguing, to the best of Applicant’s understanding, that:

(a) Only the RIGHT function of the user interface corresponds to a mouse button event, and that in the absence of a user-selection of the RIGHT function, if a keyboard function is selected (CTL, ALT, or SHIFT), then only that keyboard function itself is sent instead of a modified mouse button event (i.e., the next pen touch corresponds to only the input of a keyboard function without a mouse click and is therefore not a modified mouse event); and

(b) The RIGHT function and the BULL’S-EYE function correspond to the same function, thus claim 5 is also unsupported by the disclosure.

Regarding (a), Applicants refer to p.12, lines 8-13 of the specification, which states that, “[t]he user interface (UI) element of the invention, described in further detail with respect to Figure 3 below and referred to herein as a mouse input panel (MIP), allows a user to quickly access the functional behavior of a two-button mouse. The functional behavior of a two-button

mouse to be emulated by the pen and the MIP includes positional information, and an actuation signal for each button of the two buttons (i.e., left- and right- button down events).” Furthermore, p. 13, lines 19-20 state, “the default event that is sent to an application when the pen touches the writing surface is a ‘left button down’ event.” Additionally, p. 14, lines 19-20 state, “the MIP UI element is displayed and a user can, using the MIP, select one or more modifiers that can be attached to the next ‘pen down’ action.” (All emphases added.)

In other words, the mouse input panel is used to select modifiers that are added to the next pen input. As one of ordinary skill in the art would appreciate from the disclosure and from general knowledge of the art, a pen or stylus can alone be used to emulate a mouse input by merely tapping on the screen. As such, one of ordinary skill in the art would at least appreciate that a pen or stylus can be used to emulate the “left button down” event of a mouse. The disclosure of the present invention is expressly directed to a **mouse input** panel UI which is to be used with a stylus to input **modified** mouse events. Such modifiers are expressly disclosed as keyboard functions such as the shift, control, and alternate keys of a keyboard.

Page 15, lines 4-6, of the specification states that “[w]hen RIGHT 301 is selected, the next pen touch causes a ‘right button down’ event. When CTL 302 is selected, a CTL key accompanies the next pen touch.” The Examiner is apparently misinterpreting this statement to mean that when CTL 302 is selected, only the CTL function is sent as the next pen touch. In other words, the Examiner is relying on this section from the specification to show that the next pen touch sends an emulated press of the control key without any mouse button event at all. The Examiner appears to be under the impression that selecting the RIGHT function is the only way that the UI of the present invention sends a mouse button event. This is simply not the case and is not supported by the disclosure as a whole, nor by what would be *fairly conveyed to one of ordinary skill in the art* by the disclosure.

As previously discussed, one of ordinary skill in the art is aware of a stylus being used to emulate a left mouse button click, and the specification itself states that a default event for a pen input is a left button down event. The present invention is expressly disclosed as relating to a **mouse input** panel UI used to input **modified** mouse events, and the specification uses language such as “**accompanying** the next pen touch” [p.15, lines 4-6] and “modifiers that can be

attached to the next ‘pen down’ action” [p. 14, lines 19-20]. This language implies that the modifiers are sent **in addition to** an action caused by the pen input and not as the complete action. This action corresponds to a mouse input, or as claimed, a mouse button event. If it were true that only a keyboard function was sent by the pen touch, in the absence of selecting the RIGHT function the **mouse input** panel would no longer function to emulate a mouse input. Indeed, the panel would only be emulating a function of a keyboard. This is completely contrary to the claims, which are expressly directed to a method for emulating a **keyboard-modified mouse-type computer input device**.

Applicants submit that there is in fact no support for the Examiner’s interpretation that the keyboard functions are sent in the absence of a mouse button event. Applicants further submit that the Examiner is selectively interpreting the language of page 15 in a manner inconsistent with the provisions of § 112, 1st paragraph, which state that disclosure must *fairly convey to one of ordinary skill in the art* that the claimed features are supported.

Accordingly, Applicants submit that the claims are in fact supported by the written disclosure and respectfully request that the rejection under § 112, 1st paragraph be withdrawn.

Regarding (b), the Examiner contends that “without receiving a BULL’S-EYE function, a mouse button event modified by the user selection of at least one selected function, such as CTL key (302), a SHIFT key (303), or an ALT key (304), can’t be sent” (emphasis added). The Examiner argues similarly with respect to the RIGHT function as discussed in (a) above, and appears to believe that the RIGHT and BULL’S-EYE functions are the same (see, for example, Office Action, page 13, lines 5-6). Applicants respectfully traverse.

In the first paragraph of p. 15, the specification describes that when RIGHT is selected, the next pen touch causes a “right button down” event and that when CTR, SHIFT, or ALT are selected, these modifiers accompany the next pen touch. In the second paragraph of p.15, the BULL’S-EYE function is described as causing a “right button down” event. However, although both RIGHT and BULL’S-EYE result in sending a “right button down” event, the events respectfully caused by the RIGHT and BULL’S-EYE functions occur under different conditions.

For example, a user selection of the RIGHT function causes the next pen touch to cause a “right button down” event. The pen touch is not limited to occur in any specific location.

However, when a user selects the BULL'S-EYE function, the UI sends a right button click event to the window immediately below the BULL'S-EYE. See p. 15, lines 15-16. Therefore, the RIGHT and BULL'S-EYE functions are not the same.

Furthermore, Applicants maintain that a modified mouse button event can be sent without the selection of either the RIGHT or BULL'S-EYE functions. As argued above with respect to (a), upon the selection of one or more of the CTL, SHIFT, and ALT functions, the next pen touch corresponds to a mouse button event modified by the selected one or more functions. This "next pen touch" does not necessarily correspond to a user selection of the RIGHT or BULL'S-EYE functions.

Finally, Figure 3 exhibits that the RIGHT 301 function and the BULL'S-EYE 305 function are separately represented in the user interface, and are therefore not the same at least as pertaining to the display of the user interface. Furthermore, it has been shown that the RIGHT and BULL'S-EYE selections have different functionalities.

Accordingly, Applicants submit that the claims are in fact supported by the written disclosure and respectfully request that the rejection under § 112, 1st paragraph be withdrawn. Applicants note that the citations from the specification presented above are not meant to be exhaustive of evidence presented as a showing of support for the claimed features in the written disclosure.

Applicants further submit that the Examiner has not satisfied his burden with regard to the written description requirement of the MPEP. Applicants direct the Examiner to MPEP § 2163.04, which states:

"The inquiry into whether the description requirement is met must be determined on a case-by-case basis and is a question of fact. *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). A description as filed is presumed to be adequate, unless or until sufficient evidence or reasoning to the contrary has been presented by the examiner to rebut the presumption. See, e.g., *In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). The examiner, therefore, must have a reasonable basis to challenge the adequacy of the written description. The examiner has the initial burden of presenting by a preponderance of evidence

why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. *Wertheim*, 541 F.2d at 263, 191 USPQ at 97.

[*MPEP* § 2163.04, *emphasis added*.]

Applicants submit that the Examiner has not satisfied his burden of presenting a *prima facie* case by providing reasons why a person skilled in the art at the time the application was filed would not have recognized that the inventor was in possession of the invention as claimed in view of the disclosure of the application as filed. *See MPEP* § 2163.04 (I)(B). As discussed above, Applicants maintain that one of ordinary skill in the art would recognize, based on the disclosure as filed, support for the invention as recited in the claims.

Accordingly, Applicants submit that the claims are in fact supported by the written disclosure and respectfully request that the rejection under § 112, 1st paragraph be withdrawn. Applicants further note that the arguments against the application of the § 112, 1st paragraph rejection presented herein are meant to supplement, and not to replace, the previous arguments against the § 112, 1st paragraph rejection presented in earlier Responses to Office Actions.

Claim Rejections - 35 U.S.C. §103(a)

Claims 5 and 6 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,018,336 to Akiyama et al. ("Akiyama"). Claims 1, 7, 9, 25, 26, 28, 29, 31, 45, and 46 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Akiyama in view of U.S. Patent No. 5,500,935 to Moran et al. ("Moran"). Claim 4 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Akiyama in view of Moran and further in view of U.S. Patent No. 5,612,719 to Beernink et al. ("Beernink"). Claims 30, 32-38, 41-44, and 47 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Akiyama in view of Moran and further in view of U.S. Patent No. 5,625,833 to Levine et al. ("Levine"). Claim 40 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Akiyama in view of Moran and Levine and further in view of Beernink. As applied to the amended claims, Applicants submit the Examiner has failed to establish a *prima facie* case of obviousness and traverse the rejection.

For a 35 U.S.C. § 103 rejection to be proper, a *prima facie* case of obviousness must be established. *See M.P.E.P. 2142*. One requirement to establish *prima facie* case of obviousness is that the prior art references, when combined, must teach or suggest all claim limitations. *See M.P.E.P. 2142; M.P.E.P. 706.02(j)*. Thus, if the cited references fail to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

As amended, independent **claim 1** recites, a method for emulating a keyboard-modified two-button mouse-type computer input device, comprising the steps of: receiving a first stylus input from a user; determining whether the stylus input is preceded by a predetermined gesture made by the user; responsive to determining that the stylus input is preceded by the predetermined gesture made by the user, displaying a user interface comprising at least one user-selectable keyboard modification function from the group consisting of a shift key function, a control key function, and an alternate key function corresponding to emulations of a shift key, a control key, and an alternate key of a keyboard, respectively; receiving a user selection of at least one of the user-selectable keyboard modification functions via a second stylus input; receiving a third stylus input from the user; and sending, to a location corresponding to the third stylus input, an emulation of a keyboard-modified mouse button event corresponding to a mouse button click modified by the selected at least one user-selected keyboard modification function.

Applicants submit that the relied upon prior art, alone or in combination, fails to teach or suggest at least all of the aforementioned features of independent claim 1.

Akiyama discloses a computer system with a pen or stylus based input system, wherein a mode switching area 171 is displayed on the lower portion of the screen. *See Fig. 3*. The mode switching area is enabled to receive user input such that a RIGHT CLICK function or a MOVE function can be enabled. Specifically, when a user taps the portion of the mode switching area corresponding to the aforementioned functions, further input from the user initiates a process corresponding to the selected function, e.g., a right mouse click or a floating mouse cursor. *See col. 4, lines 7-19; col. 4, lines 57-65*.

However, Akiyama fails to teach or suggest at least the feature of “*displaying a user interface comprising at least one user-selectable keyboard modification function from the group consisting of a shift key function, a control key function, and an alternate key function*”

corresponding to emulations of a shift key, a control key, and an alternate key of a keyboard, respectively”.

The Examiner concedes this deficiency of Akiyama. *See Office Action, page 7, lines 1-3.* In order to cure this deficiency of Akiyama, the Examiner points to Akiyama, col. 6, lines 1-2, which states, “However, the other mouse functions can be emulated by increasing the selection button of the other mouse functions.” The Examiner further states,

“Therefore, while Akiyama may not exemplify particular selectable key function being a Shift, Control, or Alternate key function, one of ordinary skill in the art would have found it obvious to provide a Shift, Control, and/or Alternate key function(s) in the user interface of Akiyama, as desired, in accordance with a particular application and an allusion of Akiyama (see col. 6, lines 29-53).”
[Office Action, page 7]

However, Applicants fail to see how a statement suggesting that other **mouse functions** can be emulated could be relied upon by the Examiner as a basis for teaching that **keyboard modification functions** can be emulated to **modify a mouse button event**, as featured in independent claim 1. As one of ordinary skill in the art would appreciate, mouse functions do not comprise a shift, control, or an alternate function. These modification functions correspond to the shift, control, and alternate keys of a standard keyboard. Hence, while Akiyama may suggest that other mouse functions may be emulated, this is in no way suggestive of the emulation of keyboard modification functions. Akiyama cannot be said to suggest emulating keyboard modification functions, nor would one of ordinary skill in the art be motivated to emulate keyboard modification functions based solely on the disclosure of Akiyama. Thus, the allegations made by the Examiner amount to a taking of Official Notice.

Applicants note that Official Notice may be taken of facts outside of the record which are capable of instant and unquestionable demonstration as being “well-known” in the art. *See M.P.E.P. 2144.03.* However, if the assertion is traversed, references must be cited in support of the position taken in the Official Notice. *See M.P.E.P. 2144.03.*

In this instance, Applicants traverse the Examiner’s assertion that one of ordinary skill in the art would have found it obvious to provide a shift, control, or alternate key function in the

user interface of Akiyama, solely based on the disclosure of Akiyama. If the rejection is maintained in a future Action, the Examiner must provide sufficient evidence in support of his assertions.

Applicants submit that Akiyama fails to teach or suggest at least the aforementioned feature of claim 1. The other prior art references of record are not, and indeed cannot be, relied upon to cure at least this deficiency of Akiyama. Accordingly, claim 1 is distinguishable from the prior art. Claims 4, 7, 9, 25, 26, 28-31, 45, and 46 depend from claim 1, directly or indirectly. Therefore, for at least the reasons stated with respect to claim 1, claims 4, 7, 9, 25, 26, 28-31, 45, and 46 are also distinguishable from Akiyama.

Therefore, Applicants submit that claims 1, 4, 7, 9, 25, 26, 28-31, 45, and 46 are patentable over Akiyama and respectfully request that the rejection of said under §103(a) be withdrawn.

As amended, independent **claim 5** recites a method for emulating a keyboard-modified two-button mouse-type computer input device, comprising steps of: displaying a user interface comprising at least one user-selectable keyboard modification function from the group consisting of a shift key function, a control key function, and an alternate key function corresponding to emulations of a shift key, a control key, and an alternate key of a keyboard, respectively, and further comprises a user-selectable bull's-eye function located substantially in the center of the displayed user interface; receiving a user selection of at least one of the keyboard modification functions; receiving a user selection of the bull's-eye function; and sending, in response to receiving the user selection of the bull's-eye function, an emulation of a keyboard-modified mouse button event corresponding to a right mouse button click modified by the selected at least one keyboard modification function.

Applicants submit that the relied upon prior art, alone or in combination, fails to teach or suggest at least all of the aforementioned features of independent claim 5.

As discussed above, Akiyama discloses a computer system with a pen or stylus based input system, wherein a mode switching area 171 is displayed on the lower portion of the screen. *See Fig. 3*. The mode switching area is enabled to receive user input such that a RIGHT CLICK function or a MOVE function can be enabled. Specifically, when a user taps the portion of the

mode switching area corresponding to the aforementioned functions, further input from the user initiates a process corresponding to the selected function, e.g., a right mouse click or a floating mouse cursor. *See col. 4, lines 7-19; col. 4, lines 57-65.*

However, as discussed with respect to claim 1, Akiyama fails to teach or suggest at least the feature of “*displaying a user interface comprising at least one user-selectable keyboard modification function from the group consisting of a shift key function, a control key function, and an alternate key function corresponding to emulations of a shift key, a control key, and an alternate key of a keyboard, respectively*”. The arguments presented by Applicants, *supra*, regarding the similar feature of claim 1 are likewise applicable herein to claim 5. Therefore, at least since Akiyama and the other prior art of record cannot teach or suggest at least displaying a user interface comprising keyboard modification functions, claim 5 is distinguishable from the prior art.

Furthermore, even if Akiyama somehow taught or suggested the aforementioned feature of claim 5, which Applicants do not concede, Akiyama still fails to teach or suggest displaying a user interface “*further comprising a user-selectable bull's-eye function located substantially in the center of the displayed user interface; receiving a user selection of at least one of the keyboard modification functions; receiving a user selection of the bull's-eye function; and sending, in response to receiving the user selection of the bull's-eye function, an emulation of a keyboard-modified mouse button event corresponding to a right mouse button click modified by the selected at least one keyboard modification function*”.

In the Office Action, the Examiner points to the aforementioned RIGHT CLICK function of Akiyama as “corresponding to the bull’s eye function”. *See Office Action, page 5, lines 7-8.* Applicants respectfully traverse. First, it is apparent from Figure 3 of the present disclosure that the bull’s-eye function is located substantially in the center of the displayed user interface. There is no such function disclosed or suggested by Akiyama. Furthermore, even if, *arguendo*, the RIGHT CLICK function of Akiyama were centrally located, which Applicants do not concede, Akiyama still does not teach or suggest at least the step of sending, in response to receiving the user selection of said RIGHT CLICK function, an emulation of a keyboard-modified mouse

button event corresponding to a right mouse button click modified by the selected at least one keyboard modification function.

Akiyama teaches the RIGHT CLICK function as a mode switching user interface that is operable to switch the function associated with an input to correspond to a right mouse click. *See col. 3, lines 49-67.* However, the actual emulation of the right mouse click only occurs after a subsequent pen input. Akiyama describes the steps of “determining presence of a mode selection in accordance with position data of the detected tap; adding, when the mode selection is present, event data, showing a predetermined mouse function and corresponding to the selected mode, to position data of a tap to be detected continuously after the detected tap”. *See Akiyama, paragraph bridging columns 1-2.* Conversely, claim 5 recites that the emulation of the modified right mouse button click is sent in response to receiving the user selection of said bull’s-eye function. Accordingly, Akiyama fails to teach or suggest all of the claimed features.

In this instance, Akiyama fails to teach or suggest each and every limitation of claim 5. The other prior art of record has not been, and indeed cannot be, relied upon to correct at least this deficiency of Akiyama. Claim 6 is likewise distinguishable from the prior art at least due to its dependency from claim 5.

Therefore, Applicants submit that claims 5 and 6 are patentable over Akiyama and respectfully request that the rejection of said claims under §103(a) be withdrawn.

As amended, independent **claim 32** recites, in a stylus-based computer, a method for emulating a keyboard-modified mouse-type computer input device, comprising steps of: receiving a first stylus input from a user; determining whether the first stylus input is preceded by a particular in-air gesture; responsive to determining that the first stylus input is preceded by the particular in-air gesture, displaying a graphical user interface including at least one user-selectable keyboard function corresponding to an input modification key of a keyboard; detecting a first user interaction with the graphical user interface to select at least one of said keyboard functions; and responsive to a second stylus input, sending an emulation of a modified mouse button event modified in accordance with the at least one user-selected keyboard function.

Applicants submit that the relied upon prior art, alone or in combination, fails to teach or

suggest at least all of the aforementioned features of independent claim 30.

As discussed above, Akiyama discloses a computer system with a pen or stylus based input system, wherein a mode switching area 171 is displayed on the lower portion of the screen. *See Fig. 3.* The mode switching area is enabled to receive user input such that a RIGHT CLICK function or a MOVE function can be enabled. Specifically, when a user taps the portion of the mode switching area corresponding to the aforementioned functions, further input from the user initiates a process corresponding to the selected function, e.g., a right mouse click or a floating mouse cursor. *See col. 4, lines 7-19; col. 4, lines 57-65.*

However, Akiyama fails to teach or suggest the feature of *“displaying a graphical user interface including at least one user-selectable keyboard function corresponding to an input modification key of a keyboard; detecting a first user interaction with the graphical user interface to select at least one of said keyboard functions; and responsive to a second stylus input, sending an emulation of a modified mouse button event modified in accordance with the at least one user-selected keyboard function”*.

As with claim 1, the Examiner relies on the statement in Akiyama that “the other mouse functions can be emulated by increasing the selection button of the other mouse functions” to suggest that the mode selector area 171 can further include functions such as keyboard functions (such as shift, control, and alternate keys). *See Office Action, item 9 and page 7 regarding claim 1.*

However, Applicants fail to see how a statement suggesting that other **mouse functions** can be emulated could be relied upon by the Examiner as a basis for teaching that **keyboard functions corresponding to input modification keys of a keyboard** can be emulated to **modify a mouse button event**, as featured in independent claim 1. As one of ordinary skill in the art would appreciate, mouse functions do not comprise input modification keys of a keyboard function. Hence, while Akiyama may suggest that other mouse functions may be emulated, this is in no way suggestive of the emulation of input modification keys of a keyboard. Since Akiyama cannot be said to suggest emulating keyboard functions, nor would one of ordinary skill in the art be motivated to emulate keyboard functions based solely on the disclosure of Akiyama. Thus, the allegations made by the Examiner amount to a taking of Official Notice.

Applicants note that Official Notice may be taken of facts outside of the record which are capable of instant and unquestionable demonstration as being “well-known” in the art. *See M.P.E.P. 2144.03*. However, if the assertion is traversed, references must be cited in support of the position taken in the Official Notice. *See M.P.E.P. 2144.03*.

In this instance, Applicants traverse the Examiner’s assertion that one of ordinary skill in the art would have found it obvious to provide keyboard functions in the user interface of Akiyama, solely based on the disclosure of Akiyama. If the rejection is maintained in a future Action, the Examiner must provide sufficient evidence in support of his assertions.

Applicants submit that Akiyama fails to teach or suggest at least the aforementioned feature of claim 32. The other prior art references of record are not, and indeed cannot be, relied upon to cure at least this deficiency of Akiyama. Accordingly, claim 32 is distinguishable from the prior art. Claims 33-38, 40-44, and 47 depend from claim 32, directly or indirectly, and are also distinguishable from Akiyama at least due to the dependency from independent claim 32.

Therefore, Applicants submit that claims 32-38, 40-44, and 47 are patentable over Akiyama and respectfully request that the rejection of said under §103(a) be withdrawn.

New Claims

New claims 48-52 have been added through this Amendment, and are considered to be in condition for allowance at least due to their dependence, directly or indirectly, upon independent claims 1 and 5. No new matter has been entered.

CONCLUSION

In view of the any outstanding above remarks, it is believed that claims are allowable.

Should there be matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John R. Sanders, Reg. No. 60,166 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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